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Al- Quds University**



**Nurses' Knowledge, Perception Regarding the  
Implementation of Triage System in Pediatric  
Emergency Department at Gaza Strip**

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Implementation of Triage System in Pediatric  
Emergency Department at Gaza Strip**

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### **Thesis Approval**


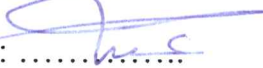

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## **Dedication**

I dedicate this work to the Almighty Allah for preserving my life, ensure my security in Gaza strip and gave me good Health and strength to be able to do this work.

To my parents for their endless prayers and my family for their encouragement. To my friends for supporting and encouragement.

To all martyrs and injuries in Palestine.

To every person help me to finish this work.

**Ahmed w. Abu Seda**

## **Declaration**

I certify that this thesis submitted for the degree of master, is the result of my own research, except where otherwise acknowledged, and that this study (or any part of the same) has not been submitted for a higher degree to any other university or institution.

## **Signed:**

Ahmed Waleed Abu Seda

Date: / /

## **Acknowledgement**

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With my appreciation and respect Ahmed Abu Seda

## **Abstract**

Triage is an essential function of staff in emergency department. Nurses' knowledge about triage is decision making, and effective decision-making can influence the health outcomes of patients. The study aimed to assess the knowledge and perception of triage of nurses about triage system in pediatric emergency departments at governmental hospitals in Gaza Strip, and determine challenges to the implementation of triage system. The study utilized descriptive, cross-sectional, analytical design. The sample of the study consisted of 112 nurses (census) from eight pediatric emergency departments. For data collection, self-administered questionnaire was developed by the researcher with response rate 93.9%. Pilot study was implemented on 10 questionnaires, and the Cronbach alpha for reliability was 0.83 for knowledge domain, 0.75 for perception, and 0.65 for challenges. The researcher used SPSS (version 22) for data analysis. Statistical analysis included frequencies, means, standard deviation, (t) test, One-way ANOVA, and Pearson correlation test. The results showed that 76.8% of study participants were male nurses, 67.3% were married, 66% have bachelor degree, 41.4% have an experience less than 3 years, 61.6% were staff nurses, and 42% are working mixed shifts (day, evening, night). The results also indicated that 33% of nurses reported that they received training about triage system. Nurses expressed above moderate (76%) knowledge about triage system, high perception (81%), and moderate challenges (57%) to implement triage system in pediatric emergency departments. Conclusion and recommendation: There were significant negative relationship between perception and challenges. Factors that led to higher knowledge about triage included training, have bachelor degree, being a nurse manager, and being from EGH. While low knowledge found among participants from the age group 28 – 38, from Gaza and the north. Higher challenges reported among single participants, and living in Khanyounis and Rafah. No significant differences related to gender, experience, and work shifts. The findings revealed the need for training programs in order to improve nurses' knowledge and skills in performing triage of the patients at pediatric emergency departments.

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## List of Abbreviations

<b>AAP</b>	American Academy of Pediatrics
<b>ATS</b>	Australian Triage System
<b>CI</b>	Confidence Interval
<b>CPETS</b>	Chinese Pediatric Emergency Triage Scale
<b>CTMS</b>	Computerized Triage Manchester Services
<b>ECS ED</b>	Emergency Care Services Emergency Department
<b>EGH</b>	European Gaza Hospital
<b>EMS</b>	Emergency Medical Services
<b>ESI</b>	Emergency Severity Index
<b>ETAT</b>	Emergency Triage Assessment and Treatment
<b>GDP</b>	Gross Domestic Product
<b>GS</b>	Gaza Strip
<b>HCPs</b>	Health Care Providers
<b>HCWs</b>	Health Care Workers
<b>IUG</b>	Islamic University of Gaza
<b>KAP</b>	Knowledge, Attitude, Practices
<b>LOS</b>	Length of Stay
<b>MOH</b>	Ministry of Health
<b>MTS</b>	Manchester Triage System
<b>NGO</b>	Non-Governmental Organization
<b>NICE</b>	National Institute for Health and Clinical Excellence
<b>NSS</b>	Nursing School Shifa
<b>NTS</b>	National Triage Scale
<b>PCN</b>	Palestinian College of Nursing
<b>PICU</b>	Pediatric Intensive Care Unit
<b>RCN</b>	Royal College of Nursing
<b>RN</b>	Registered Nurse
<b>RR</b>	Respiratory Rate
<b>SATA</b>	South Africa Triage System
<b>SDI</b>	Standard Discharge Instructions
<b>SPSS</b>	Statistical Package for Social Sciences
<b>TATTT</b>	Toowoomba Adult Triage Trauma Tool
<b>UCAS</b>	University College of Applied Science

<b>UK</b>	United Kingdom
<b>UNRWA</b>	The United Nations Relief and Work Agency
<b>USA</b>	United States of America
<b>WB</b>	West Bank
<b>WHO</b>	World Health Organization

# **Chapter One**

## **Introduction**

### **1.1 Background**

Triage is an essential function of an Emergency Department (ED) and it is a term used to describe the sorting of patients for treatment priority in ED. Also, the purpose and function of triage is to first identify patients with life-threatening or emergency conditions who cannot wait to be seen and initiate appropriate interventions, and then allocate the patient to the right area within the ED (Afaya et al., 2017). Triage at the Emergency Department (ED) aims to prioritize pediatric patients when clinical demand exceeds capacity (FitzGerald et al., 2010). As the burden on ED worldwide is steadily increasing, triage remains a fundamental intervention to manage pediatric patient flow safely and to ensure that pediatric patients who need immediate medical attention are timely treated, particularly in case of overcrowding, therefore identifying pediatric patients at a high risk of death is important in the ED to offer adequate treatment and to recognize patients in need of more intensive management and possible admission to pediatric intensive care unit (PICU) (Robert et al., 2014).

Triage is recognized as a central component of the ED and was first introduced in the 1950s in the USA (Melot , 2015). More recently, the need for triage systems was also identified in low-resource settings with reports showing that the process of triage can improve patient flow, reduce patient waiting times, and decrease mortality rate in these contexts (Bruijns et al., 2008).

A key goal of all publicly-funded health care systems is to deliver evidence-based care in the most cost-effective setting while achieving high-quality outcomes. To this end, diverting low acuity patients from the Pediatric emergency department (PED) to primary